

NEW RECORD OF MAYFLY *BAETISCA RUBESCENS* (PROVANCHER) FOR WEST VIRGINIA (EPHEMEROPTERA: BAETISCIDAE)¹

Donald C. Tarter, Daniel K. Pettry²

ABSTRACT: A new distribution record for *Baetisca rubescens* (Provancher) is reported for West Virginia. Seven mature nymphs were collected from Red Creek, Tucker County, West Virginia. Prior to this collection, *B. rubescens* has been reported only in the northeastern region of North America from New Hampshire to Quebec.

Baetisca rubescens (Provancher) is reported for the first time in West Virginia. Seven mature nymphs were collected on 1 October 1976 from Red Creek, Tucker County, West Virginia. Pescador and Berner (1981) provided excellent characters to separate the nymphs from the closely related *B. berneri* Tarter and Kirchner and *B. carolina* Traver.

Prior to this state record, four species of *Baetisca* have been reported from West Virginia: (1) *B. carolina* (Monongalia County) (Needham et al., 1935); (2) *B. callosa* Traver (Greenbrier, Mineral and Preston counties) (Needham et al., 1935; Faulkner and Tarter, 1977); (3) *B. bajkovi* Neave (= *B. lacustris* McDunnough) (Lewis, Lincoln, Pleasants and Wayne counties) (Faulkner and Tarter, 1977); and (4) *B. berneri* (Mingo County) Tarter and Kirchner, 1978). However, Pescador and Berner (1981), after making a careful study of paratypes of *B. callosa* from West Virginia, concluded that the species is not recognizable. Their examination of young nymphs of several species has shown that specimens which could be identified as *B. callosa* were collected along with more mature, easily recognizable older nymphs. Efforts are being made to collect and rear specimens from the type locality to help solve the taxonomic problem.

The closely related *B. berneri*, *B. carolina*, and *B. rubescens* occur in the cool mountain streams of the Appalachians. *Baetisca carolina* is found in Georgia, North and South Carolina, Tennessee, Virginia, and West Virginia, while *B. berneri* is known from Pennsylvania, Tennessee, Virginia and West Virginia (Needham et al., 1935; Pescador and Berner, 1981). *Baetisca rubescens* has been collected only in the northeastern region of North America from New Hampshire to Quebec. Pescador and Berner (1981) suggested these species represent a group that was either pushed or trapped in the streams of the Appalachians during Pleistocene glaciation. The collection of nymphs from Red Creek, a cool mountain stream in West

¹Received March 22, 1983. Accepted April 26, 1983.

²Department of Biological Sciences, Marshall University, Huntington, West Virginia 25701.

Virginia, helps to bridge the gap from the disjunctive species *B. rubescens* to the sister species *B. berneri* and *B. carolina*.

ACKNOWLEDGMENTS

The authors are grateful to Dr. Lewis Berner, Department of Zoology, University of Florida, Gainesville, Florida, for helping with the identification of the mayfly. Also, we thank Ms. Vickie Crager for typing the manuscript.

LITERATURE CITED

- Faulkner, C.M., and D.C. Tarter. 1977. Mayflies, or Ephemeroptera, of West Virginia with emphasis on the nymphal stage. *Ent. News* 88: 202-206.
- Needham, J.B., J.R. Traver and Y. Hsu. 1935. *The Biology of Mayflies*. Comstock Publishing Company, Inc. Ithaca, New York. 759. p.
- Pescador, M.L. and L. Berner. 1981. The mayfly family Baetiscidae (Ephemeroptera). Part II. Biosystematics of the genus *Baetisca*. *Trans. Amer. Ent. Soc.* 107: 163-228.
- Tarter, D.C., and F.R. Kirchner. 1978. A new species of *Baetisca* from West Virginia (Ephemeroptera: Baetiscidae). *Ent. News* 89: 209-213.

BOOKS RECEIVED AND BRIEFLY NOTED (Continued)

INSECTS ON GRAIN LEGUMES IN NORTHERN AUSTRALIA. M. Shepard et al. 1983. Univ. Queensland Press. 89 pp. \$8.50 pbk.

Over 260 arthropod species were recorded in a survey of potential pests and their enemies. 115 fine color photographs provide a ready field guide to identification.

VARIABLE PLANTS AND HERBIVORES IN NATURAL AND MANAGED SYSTEMS. R. Denno & M. McClure, Eds. 1983. Academic Press, 717 pp.

Understanding the dynamics of plant-herbivore relationships and applying this knowledge in agriculture and silviculture are the themes of this volume.

WINDBORNE PESTS AND DISEASES: METEOROLOGY OF AIRBORNE ORGANISMS. D.E. Pedgley. 1982. Halsted Press: John Wiley & Sons. 250 pp. \$59.95

This book describes and explains the influence of the atmosphere on the wind-borne movement of small organisms, and how they get into and out of the atmosphere. It is a book for biologists, entomologists and ecologists, by a meteorologist.